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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,384	02/15/2002	John B. Rosen	RPD 3B5	3970

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EXAMINER

NGUYEN, CHANH DUY

ART UNIT PAPER NUMBER

2675

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/077,384

**Applicant(s)**

ROSEN ET AL.

**Examiner**

Chanh Nguyen

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The references listed on the Information Disclosure Statement filed on July 12, 20002 have been considered by examiner; see attached PTO-1449.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "display mounted at the steering column along the first axis" to claim 11, "the display mounted on the steering column forward of the steering mechanism" to claim 3, and "the display mounted along a central axis of the steering column" to claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Example is Figures 1-7 simply show the display system (12) mounted on the vehicle's front console (14), not on the steering column as recited in claims 3-4 and 11. In addition, pages 4-5 of the specification detail of Figures 1-3 how the display system (12) mounted on the vehicle's front console (14). The vehicle front console (14) is not the vehicle's steering wheel.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 5-6, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura (U.S. Patent No. 5,013,135) in view of Bordo et al (U.S. Patent No. 5,237,455).

As to claim 1, Yamamura disclosed in a vehicle having a forward region (e.g., dashboard), a display system including a display (2) mounted on the forward cosole of the vehicle, the display (2) including a generally horizontal display surface configured to present an image; see figure 1 and see column 3, lines 60-65. Yamamura teaches a reflecting element 6) configured to reflect the presented image for viewing by a vehicle occupant; see column 4, lines 37-40. The only thing different from the claim and the reference of Yamamura is that Yamamura teaches a reflecting element, but does not mention reflecting element being an opaque reflecting element. In the same field of endeavor, Bordo teaches an reflecting element (22) coating with a thin film of aluminum or color selection which is characterized as opaque coatings (see column 3, lines 14-22). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have substituted the opaque reflecting element of Bordo to the reflecting element of Yamamura so as to provide a brighter, clearer image and no double image to the vehicle occupant (see column 2, lines 1-5 of Bordo).

As to claim 5, this claim differs from claim 1 in the limitation "horizontal display surface" recited in claim 1 is deleted from claim 19. In addition, the limitation "an upwardly-facing display surface" and the limitation "the mirror being mounted to the base for pivot between a stowed orientation wherein the reflective surface is generally parallel with the display surface" are additionally recited. Yamamura clearly teaches the display (2) including upwardly surface display surface as shown in figure 1. The display (2) of Yamamura is positioned similar to the display (30) of the applicant's invention.

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The additional limitations such as "an angle" is clearly taught by Yamamura (i.e. the reflecting element (6) positioned at an angle relative to the display surface 2).

Yamamura clearly teaches that "a combiner 6 is mounted to the upper plate 5 in a manner such that it can be vertically rotated while being fixed at any adjusted position" (see column 3, lines 45-48. The upper plate (5) of Yamamura is also a base of the display 2 because the display (2) is supported by the plate (5) via back plate (7). Since the combiner (6) can rotate any position as disclosed in column 3, lines 45-48, it would have been obvious that the combiner (6) can rotate to the close position of lens (3) which is parallel to the display surface (2) so that a user can view the real image clearer when the head up display is not in use. Moreover, Bordo teaches the combiner (22) can be folded to the same level of the upper surface of the dashboard. Thus combining Yamamura's device with the device of Bordo would provide the combiner (6) of Yamamura is positioned to the upper plate (5) or lens which is parallel with the display surface (2) for the same reason mentioned above.

As to claim 2, Yamamura teaches well-known in the art of the forward console including a steering mechanism (see Figure 9) and the display is mounted forward of the steering mechanism.

As to claim 6, Bordo teaches the mirror (22) being a concave mirror (see column 2, lines 63-64.

As to claim 8, Yamamura clearly teaches a flat plane mirror (6) as shown in Figures 1 and 3.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura in view of lino (U.S. Patent No. 5,070,323).

As to claim 11, note the discussion of Yamamura above, Yamamura discloses the claimed vehicle as recited in claim 11 above with exception of describing "opaque reflective surface" and "the display mounted on the steering column along the first axis". In the same field of endeavor, lino teaches the reflecting member 4 made of a transparent plastic having the reverse side thereof applied with black coating or made of a black plastic plate (see column 2, lines 60-64). This reads on claimed "an opaque reflective surface configurable to reflect the focused image for viewing from the operator position". lino teaches the display (e.g., 71, 75) being mounted on a steering column forward of the steering wheel (see column 3, lines 15-25, lines 47-59). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the opaque reflecting surface and steering column for mounting display as taught lino to the display system of Yamamura as modified by Bordo so that the contents of display of the displays can be recognized at the driver's seat due to the reflection (see column 1, lines 30-34 of lino) as well as displays can be accommodated in the space by the column (see column 1, lines 23-26 of lino).

7. Claims 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura in view of Bordo et al as applied to claim 5 above, and further in view of Chen et al (U.S. Patent No. 5,436,763).

As to claim 7 , note the discussion of Yamamura and Bordo above, both do not mention a convex mirror. In same field of endeavor, Chen teaches a reflective optical element (mirror 24) being either concave or convex which depends upon application (see Figure 2 and see column 4, lines 32-35). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used a convex mirror of Chen to the mirror of Yamamura as modified by Bordo so as to provide magnification (see column 4, lines 32-35 of Chen).

As to claims 9 and 10, Chen teaches the reflective optical element (24) either concave or convex mirror depending upon the application. A flat-to concave mirror and a flat-to-convex mirror are all well-known in the art. It would have been obvious to substitute well-known the flat-to concave mirror or the flat-to-convex mirror to the mirror of Yamamura for the same reason as mention above.

8. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura in view of Bordo as applied to claim 1 above, and further in view of lino et al (U.S. Patent No. 5,070,323).

As to claims 3-4, note the discussion of Yamamura and Bordo above, both do not mention the display mounted on the steering column forward of the steering wheel. lino teaches the display (e.g., 71, 75) being mounted on a steering column forward of the steering wheel (see column 3, lines 15-25, lines 47-59). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used steering column for mounting display as taught lino to the display system of Yamamura



as modified by Bordo so that displays can be accommodated in the space by the column (see column 1, lines 23-26 of lino).

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chapman (U.S. Patent No. 5,986,795) is cited to teach well-known a flat-to-convex and a flat to concave mirror.

***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306**

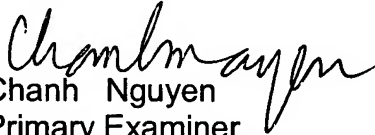
Hand-delivered responses should be brought to Crystal Park II, 2121  
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



C. Nguyen



Chanh Nguyen  
Primary Examiner  
Art Unit 2675

September 10, 2004